FORCEnet Data Strategy

"Transforming Information Into Decisive Effects"

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FORCEnet Objective

► The FORCEnet Chief Engineer plans and oversees the establishment of a FORCEnet Environment that creates desired capabilities by using existing and planned functions within the DoN's resources

  – DoN Capabilities, System Functions, and Infrastructure Resources are the cornerstones of the FORCEnet Environment

► The FORCEnet environment will facilitate the automated sharing of information in accordance with the ASD NII Net Centric Checklist. The automated sharing of information can either be as:

  – A Net-centric service or

  – Usable information presented to a human in a common, easily understandable format and display

► The FORCEnet Data Strategy will discuss achievement of this "Automated Sharing of Information"

What is the FORCEnet Data Strategy?

► An implementation of net-centricity

► The development of a Framework for a mission to capture the data requirements, guidelines, and procedures

► An ability for the data framework to be governed

► Giving guidance to the data producers / owners for exposing data to the net

► The development of context for data users to support their mission

► The FORCEnet Data Strategy transforms "Data" into "Mission Information"

Mission Context

► Mission Context allows the user to use data to complete their mission

► Mission completion and the information for that completion is the central concept

► The FORCEnet Data framework has to capture the data requirements, guidelines, and procedures for Mission Completion

Mission creates the Context

Information Quality Criteria

► JCS Joint Pub 6-0 (<u>Doctrine for Command, Control, Communications and Computer (C4) Systems Support to Joint Operations</u>) describes data with a combination of seven information quality criteria (JCS Joint Pub 6-0 Page 1-5) as usable information:

- **Accuracy - Information conveys the true situation**

- **Relevance - Information applies to the mission**

- **Timeliness - Information that is available in time to make the decision**

- **Usability - Information that is in common, easily understood format and displays**

- **Completeness - All necessary information is required by the decision maker**

- **Brevity - Information only has the level of detail required**

- **Security - Information that has been afforded adequate protection where required**

"Information is data collected from the environment and processed into a usable form" (JCS Pub 6-0 page 1-3)

► User was concerned with data being:
  – Usable,
  – Brief (Appropriate level of detail), and
  – Timely

► User had to assume data was:
  – Relevant
  – Accurate
  – Complete
  – Secure

The burden was on the User to transform "Data" into "Mission Information"

► Analyst was concerned with data being:
- Relevant
- Accurate
- Complete
- Secure

► Analyst traded off:
- Usability
- Timeliness
- Brevity

The Analyst processed "Data"
to create "Mission Information"

► Automation of "Data" to "Mission Information" has to consider all seven criteria:

- Brief

- Timely

- Usable

- Relevant

- Accurate

- Complete

- Secure

FORCEnet Data Strategy strives to automate the transformation of "Data" to "Mission Information"

► Sharing of data on the net does not ensure:
- Relevancy,
- Accuracy,
- Completeness,
- Brevity, or
- Security

► Sharing can assist with:
- Timeliness
- Usability

**The FORCEnet Data Strategy
is more than Accessibility**

Framework For Mission Context

► The FORCEnet Data Framework has to capture and manage Mission Data Requirements, Guidelines, and Procedures

  – Requirements are the Who, Why, and What

  – Guidelines are When and Where

  – Procedures are How

**Mission Completion is enabled
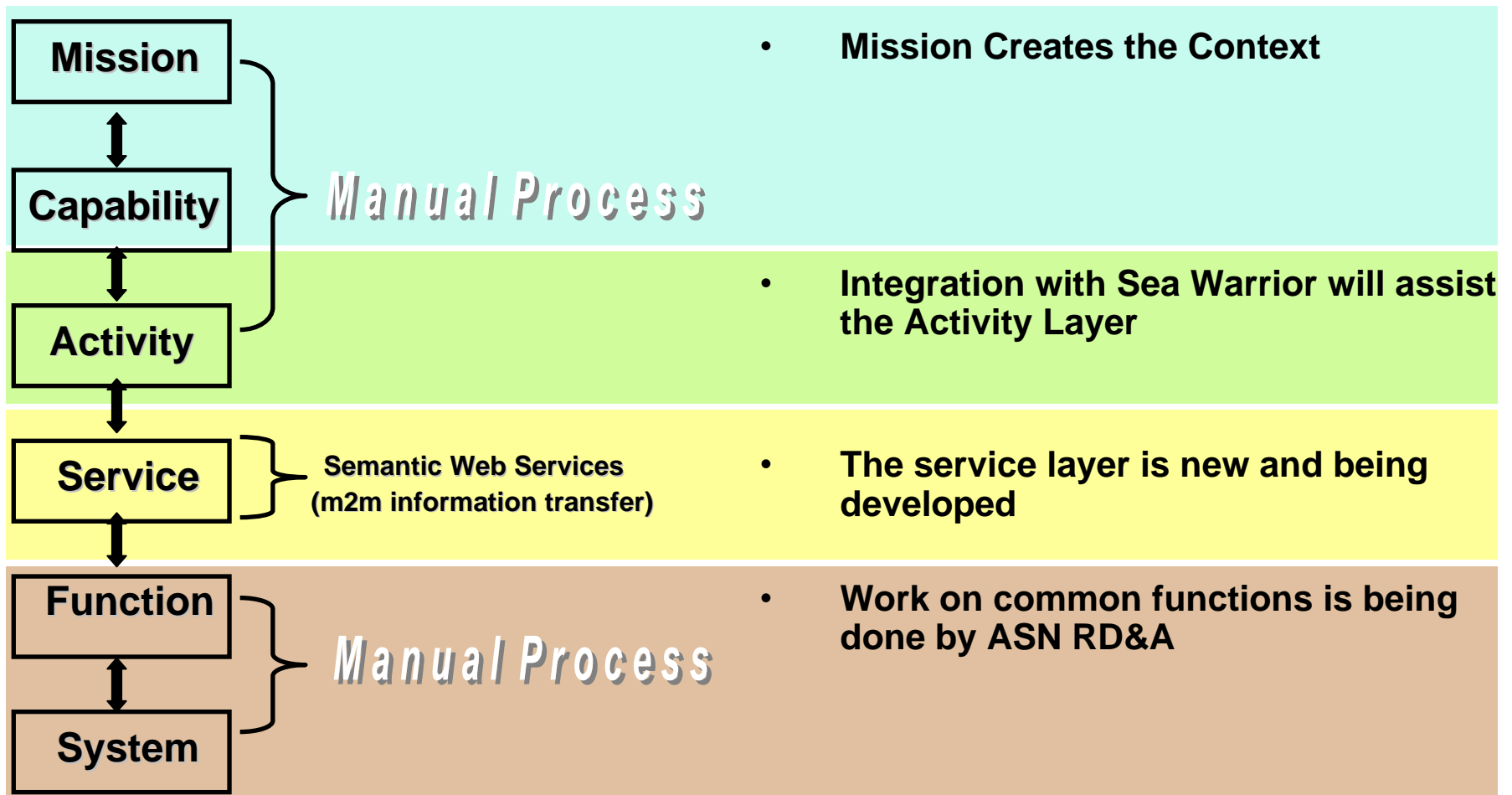by our FORCEnet Data Framework**

Framework For Mission Context

► The concept of understanding Requirements, Guidelines, and Procedures is in our Tactics, Training, and Procedures (TTPs), but is not managed for the enablement of the automation of "Data" to "Mission Information"

- Requirements
  - SECNAV 5000.36 called out that "requirements" had to be defined to become an authoritative data source
- Guidelines
  - The ASD NII Checklist and OPNAV FORCEnet Consolidated Compliance Checklist provided guidelines on Data
- Procedures
  - The 8320.2 specifies many data procedures

Our Framework will Capture and Manage Requirements, Guidelines, and Procedures

Mission

Capability

Manual Process

Activity

Service

Semantic Web Services
(m2m information transfer)

Function

Manual Process

System

- **Mission Creates the Context**

- **Integration with Sea Warrior will assist the Activity Layer**

- **The service layer is new and being developed**

- **Work on common functions is being done by ASN RD&A**

Questions?